



TREE CARE AFTER STORMS

Snow, ice, tornadoes, hail, and high-velocity winds are just a few of the natural perils Missouri's trees experience. When storms damage trees, cleanup and recovery can be bewildering. Some injured trees can be treated and repaired to maintain their health and value to your home. Others should be removed. Below are tips that will help you make the right decisions for your trees.

Safety first

Damaged trees often are tangled with overhead or down utility lines, creating a dangerous situation. Under no circumstances should you remove limbs that have electrical lines running through them. Treat all lines as if they are live; do not touch or approach them. Alert your electricity provider immediately to the danger, and allow these experts to assess the danger. Special training is required to prune branches near power lines.

If there is no danger from electrical lines, the first step is to remove trees or limbs that have fallen on your home or are blocking access. Also look for hanging limbs up in the trees that could drop on your home and family. Any remaining tree damage can wait until the immediate crisis has passed. As long as there isn't a safety risk, take your time to assess the damage and make deci-

Check homeowner insurance policy before starting tree work

In all but life threatening situations, you may want to contact your insurance carrier before any tree work is performed. Many homeowner policies will cover at least part of the cost of tree removal if some structural damage has occurred.

sions on which trees to cut and which ones to save.

Small-sized tree debris on the ground can be cleaned up by most homeowners. Be sure of your footing before you start, especially after ice and snow storms. Unless you are familiar with the safe operation of chain saws and climbing equipment, major tree repair and cleanup should be left to professional arborists. If you do any of the work yourself, wear eye and ear protection, a hard hat, and leather gloves. If operating the chain saw, also wear chain-saw chaps.

Can the tree be saved?

Be patient. If a tree doesn't present a hazard, take the time to figure out the best way to care for the tree. If you need the help of a professional arborist, you may have to wait several weeks or months to hire the best ones after a major storm has hit an area.

Assess the situation. Often damage is relatively minor, with only the smallest branches of the tree being injured. Usually

injury of this type results in little or no permanent damage to the tree. All that needs to be done is

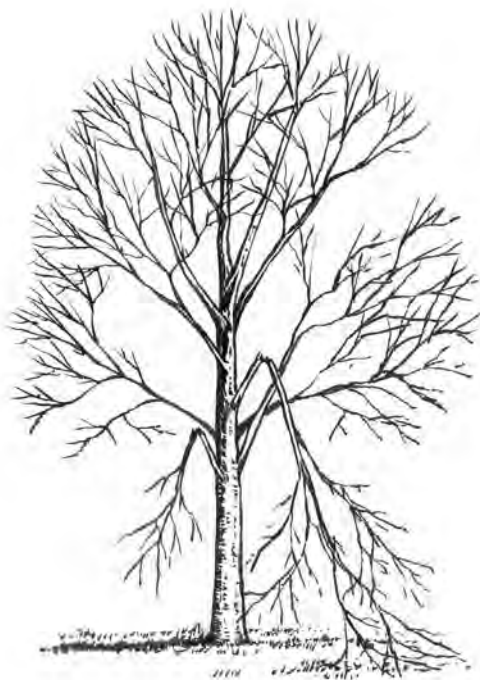
to clean up the broken twigs and perhaps lightly prune to restore a pleasing shape. Remove loose or loosely attached branches, but don't over prune.

If you experience more severe damage

such as large broken limbs and splitting, ask yourself, "Given the condition, is it worth saving the tree?" In general, save a tree only if more than 50 percent of the crown remains intact and if, when repairs are made, the tree will be attractive and of value. Other factors to consider include the tree's age, species, location, and sentimental value. When all of these are considered, it may be more desirable to replace the tree than repair it. If you are not sure, ask a local arborist, urban forester, or professional tree service.

Don't take on more than your skill level allows!

Chain saw and other heavy work, especially off the ground, and all work on large trees should be done by a professional arborist who has the correct special equipment and training.



When the damage is limited to a few small branches, light pruning is usually all that is needed.

Assessing the damage

First remove loose or loosely attached branches to avoid further injury to trees you want to keep. Branches that have pulled away from the trunk should be removed at the bottom of the rip. Broken but firmly attached branches that pose no immediate danger of falling can be pruned whenever convenient after the more hazardous branches have been removed.

Never top or severely prune storm-damaged trees. Topping weakens trees and will subject them to more damage in future storms.

Don't worry if the tree's appearance isn't perfect after it is

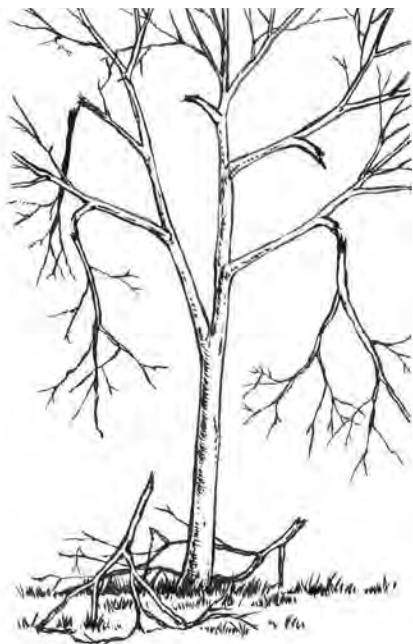
pruned. With branches gone, the tree may look unbalanced or naked at first. A healthy mature tree can recover even when several major limbs are damaged. You'll be surprised at how fast the new foliage grows and the tree returns to its natural beauty.

If a valuable tree appears to be a borderline case, resist the temptation to simply cut the tree down and be done with it. In such cases, it is usually best to stand back for a while and think it over. Remember: Time is on your side. After carefully pruning broken branches, give the tree time to recover. A final decision can be made later.

After carefully pruning broken branches, give the tree time to recover. Often new foliage will return the tree to its natural beauty. If not, the decision to remove the tree can always be made later.



Remove broken branches at the bottom of the rip. The dotted line above shows where to cut.



When to remove the tree completely

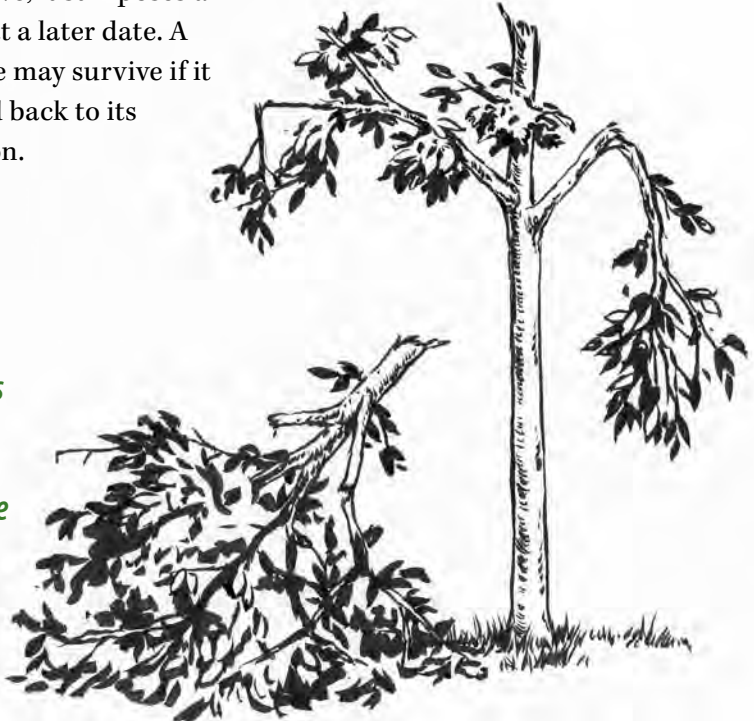
Some trees simply cannot be saved or are not worth saving. If a tree has already been weakened by disease, the trunk is split, or more than 50 percent of the crown is gone, the tree should be removed.

Wind and heavy rain can put severe stress on the roots and trunk. If a tree tips in a storm, it often means the roots were damaged or poorly developed before the storm pushed it over. Trees leaning from root breakage usually do not survive well and should be removed. If a tipped tree does survive, it still poses a risk of falling at a later date. A very young tree may survive if it is gently pulled back to its vertical position.



Trees with split trunks have been severely weakened and should be removed.

A tree that loses 50 percent or more of its crown should be removed.



Selecting an arborist

Arborists are people who have made a career out of tree care. While all arborists are primarily involved in the planting, pruning, and caring for trees, some also offer other services such as insect and disease care, hazardous tree identification, tree inventory, tree appraisals, fertilization, and tree management planning.

When hiring someone to work on your trees, be sure you use a certified, experienced professional arborist. Here are some tips to help you find a qualified person in your area.

- Check the phone directory. Listing in the directory does not mean they are good, but that the companies are permanent and local. It also means that you should be able to find them later if something goes awry.
- Ask for proof of certification and of membership in professional organizations. The International Society of Arboriculture certifies individual arborists. These individuals have years of experience and training, have proven their knowledge to ISA, and continue to educate themselves annually. To find out who is certified in your area, go to **TreesAreGood.com**. The



Kansas Arborist Association has a similar and well-respected certification program.

- Ask for proof of worker's compensation and liability insurance. The arborist should be able to provide copies of insurance certificates. Call their insurance providers to verify that the policies are still in effect and for the amounts specified. Be sure the liability insurance is adequate to cover all potential accidents.
- Ask for local references. Good arborists are proud of their work and can provide a list of past clients.



Hiring just anyone who shows up at your door may result in fatal damage to your trees. It's best to go with a qualified professional arborist.

—National Arbor Day Foundation illustration

- Do not accept take-it-now deals. The person offering these deals may pressure you into doing something you will regret later.
- Get multiple estimates for your job, but remember the best arborist for you may not give the lowest bid.
- Good arborists do not recommend topping. They will recommend removal and replacement of the tree.
- A conscientious arborist will not use climbing spikes unless the tree is to be removed or someone is hurt. Spikes damage trees unnecessarily.

Warning: Use caution before hiring people who knock on your door. Good arborists generally are too busy to generate business this way. Door knockers are especially common after a storm and are notorious for recommending tree topping, an unhealthy tree-trimming practice.

Reducing tree damage in future storms

With the right type of tree for your yard and with a little care through the years, you can reduce the amount of damage your trees will sustain in storms.

Think ahead when planting. Avoid trees prone to breakage. Silver maple, box elder, poplar, and Bradford pear have brittle wood that is easily broken. While all of these fast-growing trees are popular, they are highly susceptible to storm damage and shouldn't be planted. For a list of trees recommended for planting in your area, go online or write for a free copy of "Missouri Urban Trees." See next page for addresses.

Prune early. Regularly prune dead or weakened limbs and occasionally thin excess branches from the tree's crown, especially when the tree is young. The goal is to produce a well-shaped tree with the center of gravity squarely over the trunk and a crown that lets wind pass through rather than catching it like a sail.

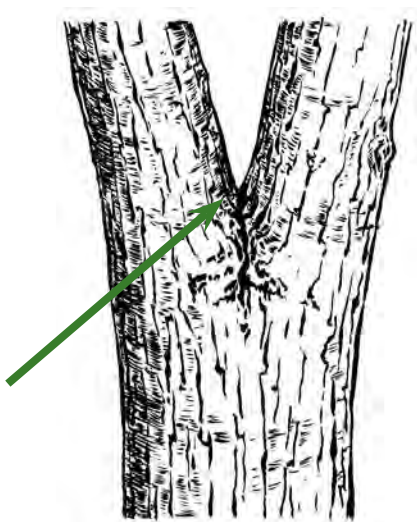
Encourage good branch angles.

Narrow angles between branches signal a point of future weakness. As two branches grow closely together, neither has sufficient space to add the wood needed

for strength. Instead, they grow against each other. The effect is similar to hammering a wedge between them. To prevent this, remove one of the two branches when the tree is young.

Remove rubbing branches, suckers, and watersprouts. Suckers are shoots that originate at the base of the tree and compete with the main trunk. Watersprouts are shoots that grow after pruning especially after topping a tree. Both suckers and watersprouts grow fairly rapidly and lack strength. Consequently, they are easily broken in storms.

Prune properly. Don't cut branches back to stubs. To find out about proper pruning techniques, go online or write for a free copy of "Basic Pruning Guidelines."



Experts agree: Don't top your tree!

Under no circumstances should trees be topped. Such a drastic pruning practice also is called dehorning, hat racking, or stubbing back. This improper, pruning creates large wounds that rarely seal and are a convenient entry point for insects and decay. In addition, such radical pruning results in a profusion of sucker sprouts. These sprouts grow quickly, resulting in a flush of weak new growth. Suckers are the first to go in a storm. For more information on tree topping, check out the “Resources” section at mocommunitytrees.org or find your local MDC forester at mdc.mo.gov

Protect roots. Root damage can lead to tree decline and death, even without a storm. Avoid causing root damage by not compacting the soil, suffocating roots with fill dirt, or by cutting roots. Home construction, remodeling, trenching for utilities, paving a driveway, replacing a concrete slab, or other activities with heavy equipment can damage roots.

Remember: Tree roots can spread 2–4 times the height of the tree and that the bulk of the fine feeder roots are in the upper 6–12 inches of soil.



Should you replant after a storm?

Trees are a valuable resource and can improve the value of your home. Here are some facts to help you decide if you want to replace a storm-damaged tree with a new one.

- A properly placed shade tree can reduce your heating and cooling costs. More information is available in the free publication, “The Right Tree in the Right Place,” which is also available online. See below for addresses.
- A landscaped yard can increase property values up to 20 percent.
- By slowing stormwater runoff, trees help prevent erosion.
- Trees provide food and shelter for a myriad of wildlife.
- By absorbing airborne pollutants, trees help moderate air pollution, as well as produce the oxygen we breathe.

- Trees are aesthetically appealing.
- Trees block out noise and screen undesirable views.
- The greener the residence, the lower the crime rate.
- Girls who can view nature from their home score higher on tests of concentration and have better self-discipline.
- Spending time in a natural setting relieves symptoms of attention deficit disorder in children. The greener the setting, the more the relief.

For more information and to request free publications, contact the Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65109-0180. Publications mentioned in this booklet also are available online at **mdc.mo.gov**.

Notes



Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, religion, national origin, sex, ancestry, age, sexual orientation, veteran status, or disability. Questions should be directed to the Department of Conservation, PO Box 180, Jefferson City, MO 65102, 573-751-4115 (voice) or 800-735-2966 (TTY), or to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C Street, NW, Washington, D.C. 20240.